What is claimed is:

1. A cytoplasmic transduction peptide characterized in the said cytoplasmic transduction peptide has a cell membrane transduction potential; where a cell is treated with said cytoplasmic transduction peptide for a period of time and then treated with a protease, a cell membrane transduction by said cytoplasmic transduction peptide continues to occur; and after said cell membrane transduction, said cytoplasmic transduction remains in the cytoplasm of said cell.

2. The cytoplasmic transduction peptide according to claim 1, wherein said cytoplasmic transduction peptide comprises α-helix formation-enhancing amino acids having a positively charged R-group as a pivotal amino acid.

3. The cytoplasmic transduction peptide according to claim 1, wherein said cytoplasmic transduction peptide comprises at or near the N-terminal of its α-helix region an amino acid exhibiting relatively high freedom at the φ and ψ rotations of a peptide unit.

4. The cytoplasmic transduction peptide according to claim 2, wherein said amino acid is arginine or lysine.

5. The cytoplasmic transduction peptide according to claim 4, wherein said amino acid is arginine.

6. The cytoplasmic transduction peptide according to claim 4, wherein said amino acid exhibiting relatively high freedom at the φ and ψ rotations is glycine.

7. The cytoplasmic transduction peptide according to claim 3, wherein said cytoplasmic transduction peptide comprises at least a peptide represented by the following formula:

$$A\text{-}X_1\text{-}X_2\text{-}B\text{-}X_3\text{-}X_4\text{-}X_5\text{-}X_6\text{-}X_7\text{-}X_8$$

wherein A is an amino acid exhibiting relatively high freedom at the φ and ψ rotations of a peptide unit, and at least 3 residues of X_1, X_2, B, X_3, X_4, X_5, X_6, X_7, and X_8 are arginine or lysine.

8. The cytoplasmic transduction peptide according to claim 7, wherein said A is glycine or alanine.

9. The cytoplasmic transduction peptide according to claim 8, wherein said A is glycine.

10. The cytoplasmic transduction peptide according to claim 7, wherein at least 4 residues of X_1, X_2, B, X_3, X_4, X_5, X_6, X_7, and X_8 are arginine or lysine.

11. The cytoplasmic transduction peptide according to claim 9, wherein at least 5 residues of X_1, X_2, B, X_3, X_4, X_5, X_6, X_7, and X_8 are arginine or lysine.

12. The cytoplasmic transduction peptide according to claim 11, wherein at least 6 residues of X_1, X_2, B, X_3, X_4, X_5, X_6, X_7, and X_8 are arginine or lysine.

13. The cytoplasmic transduction peptide according to claim 12, wherein at least 7 residues of X_1, X_2, B, X_3, X_4, X_5, X_6, X_7, and X_8 are arginine or lysine.

14. The cytoplasmic transduction peptide according to claim 1, wherein said cytoplasmic transduction peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs:1-14.

15. The cytoplasmic transduction peptide according to claim 14, wherein said cytoplasmic transduction peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs:1-6, 8-10 and 13-14.

16. The cytoplasmic transduction peptide according to claim 15, wherein said cytoplasmic transduction peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs:1-2 and 13-14.

17. The cytoplasmic transduction peptide according to claim 16, wherein said cytoplasmic transduction peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs:1 and 13.

18. A nucleic acid molecule encoding the cytoplasmic transduction peptide according to any one of claims 1-17.

19. A cytoplasmic transduction system comprising the cytoplasmic transduction peptide according to any one of claims 1-17 and a biologically active molecule covalently linked to said peptide.

20. A method for delivering a biologically active molecule into the cytoplasm of a cell, which involves applying the cytoplasmic transduction system according to claim 19 to said cell.

21. A method for delivering a biologically active molecule into the cytoplasm of the cells of an individual, which comprises administering the cytoplasmic transduction system according to claim 19 to said individual.

22. The method according to claim 21, wherein said cell is a liver cell or a lymphoid cell.